

CLAIM AMENDMENTS

1. (Currently Amended) A lamp comprising:

an illuminant section having an illuminant for ~~irradiating a~~ radiating light, whose
having a size being determined by an arc length and a direction of the arc length being equal
to a direction of along an optical axis of the lamp, and the illuminant having a center point of
the illuminant being equal in position to one ellipsoidal focus of the lamp;

a lamp reflector for condensing a light flux emitted from the center point of the
illuminant ~~by its ellipsoidal~~, the reflector being an ellipsoid of revolution about the optical
axis into the other and the center point of the illuminant being located at an ellipsoidal focus
of the lamp reflector and on the optical axis; and

a lamp front glass having a plate-shaped incident plane surface and a plate-shaped
outgoing plane surface, for receiving the light flux reflected by the lamp reflector through the
incident plane surface and outputting the light flux through the outgoing plane surface,
wherein

~~the ellipsoidal ellipsoid of revolution of the lamp reflector is formed by~~
~~deforming with a~~ a deformed aspherical reflection surface which ~~is in~~ has a rotational
symmetry of rotation to about the optical axis, and

at least one of the incident plane surface and the outgoing plane surface of the
lamp front glass is ~~so formed by deforming with a~~ a deformed aspherical lens surface which
~~is in~~ has a rotational symmetry ~~of rotation to about~~ the optical axis, and

a different power for each radiation direction is applied ~~to each light flux from~~
~~the illuminant~~ by the aspherical reflection surface and the aspherical lens surface apply in
order to suppress a, suppressing distribution of a divergent angle divergence angles of the
light flux at the outgoing plane surface of the lamp front lens glass.

2. (Currently Amended) The lamp according to claim 1, wherein the ~~divergent angle~~
divergence angles of the outgoing light flux at an optional a point on the outgoing plane
surface of the lamp front lens becomes glass become constant.

3. (Currently Amended) A condensing optical system comprising:

the lamp according to claim 1;

an integrator optical system for receiving through ~~its~~ an incident plane a light flux
output from the lamp, which is condensed on a condensing point of the aspherical lens
surface ~~of the lamp~~, and for reflecting the light flux ~~by its~~ at a side surface, and for outputting

the light flux through ~~its~~ an outgoing plane.

4. (Currently Amended) The condensing optical system according to claim 3, wherein ~~a shape of the integrator optical system is~~ has a square pole shape having an incident plane and an outgoing plane ~~of with a rectangle-shaped rectangular shape~~, and the integrator optical system comprises:

an outgoing aperture having a ~~rectangle-shaped~~ rectangular area ~~which is~~ equal in area to the area of the incident ~~plane surface~~ of the integrator optical system, ~~and wherein~~ the outgoing aperture is fixed to the incident plane of the integrated optical system;

~~a duct-shaped mirror having an incident aperture of the duct-shaped mirror has an rectangle-shaped~~ with a rectangular area which is larger than the area of the outgoing aperture, through which the light flux emitted from the lamp is input; and

four planar mirrors ~~whose~~ having reflecting surfaces that enclose the optical axis of the integrator optical system, wherein at least a part of the incident light, other than the incident light which is directly input into the ~~incident plane of the~~ planar mirrors is reflected by the reflecting ~~surface~~ surfaces of the planar mirrors and output through the outgoing aperture.

5. (Currently Amended) An image display device comprising:
the condensing optical system according to claim 3;
a relay optical system for relaying ~~lights~~ light output from the condensing optical system;

an optical modulation element for ~~giving~~ adding image information to the ~~lights~~ light output from the relay optical system, and for outputting the ~~lights~~ light with the image information;

a projecting optical system for projecting the ~~lights~~ light with the image information output from the optical modulation element; and

a screen for receiving the ~~lights~~ light projected by the projecting optical system and for displaying ~~the~~ an image based on the image information.

6. (Currently Amended) The image display device according to claim 5, wherein the optical modulation element ~~is made up of~~ includes a plurality of ~~small-sized~~ mirrors ~~and acts as a reflecting optical modulation means~~ for outputting the ~~lights~~ light with the image information to the projecting optical system.

7. (Currently Amended) The image display device according to claim 5, wherein the

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optical modulation element ~~is made up of~~ includes a liquid crystal panel for controlling the ~~lights~~ light with the image information by polarization or light scattering.